In the Specification:

[0029] FIG. 4 is a schematic block diagram illustrating the internal configuration of an I/O unit according to a preferred embodiment of the present invention. Referring to FIG. 4, a logic control unit 411 generates and provides an internal control signal to a checking circuit 413, a data output latch 415, and a data input latch 417 according to a control signal which is generated by the nonreal-time data interface unit 210 and transmitted via the control bus. In addition, the logic control unit 411 provides an acknowledgement signal "ack", which is used to indicate the current state of the I/O unit 220. When it is required to transmit the nonreal-time data through the I/O unit 220, the nonreal-time data is transmitted to a bi-directional bus 41 via the data bus first, and then the data output latch 415 extracts the nonreal-time data from the bi-directional bus 41, and determines ~~when~~ to output the nonreal-time data via the data output bus according to the control of the control logic unit 411. Oppositely, when it is required to transmit the real-time data via the I/O unit 220, the real-time data is stored into the data input latch 417 via the data input bus first, and then it is determined whether to transmit the real-time data to the bi-directional bus 41 or not according to the control of the control logic unit 411.